The Meta-Cycle: Action Research As An Orchestrator of Situated Research Inquiry

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'Healing', Papa would tell me,'is not a science, but the intuitive art of wooing Nature.'
WH Auden, 1969.

Introduction

The Community and the Disease

In the preface to his famous work 'The Man Who Mistook His Wife For A Hat', the celebrated neurologist Sacks discussed the process of research (Sacks, 1985). He wrote '…I feel myself a naturalist and a physician both; and that I am equally interested in diseases and people' then continuing, 'My work, my life, is all with the sick – but the sick and their sickness drives me to thoughts which, perhaps, I might otherwise not have…. Constantly my patients drive me to question, and constantly my questions drive me to patients…'

Though celebrated, Sacks's career was also marked by the difficulty he had in publishing observational research even though he considered that work to be important in framing his further studies and in revealing motivations, intentions and perspective. In 1969 he embarked on what was ostensibly a double-blind trial of Levodopa (L-dopa) on a large group of patients who previously had encephalitis. He reported that the circumstance of the patients caused him to pause for two years before commencing the trial. His were not "'ordinary' patients with Parkinson's disease", but patients with complex pathophysiological symptoms, whose social environment had been institutional for decades. Sacks wrote (Sacks, 1983):

"…even before I started, I was faced by scientific and human complexities, complexities and perplexities of a sort which had not arisen in previous trials of Levodopa, or, indeed, of any treatment in the past. Thus there was an element of the extraordinary, the unprecedented, the unpredictable. I was setting out, with my patients, on an uncharted sea...."

Sacks's trial of Levodopa evolved into a full treatment programme that he likened to giving the patients "the very air that they breathed". The extraordinary responses of his patients were profiled in Sacks's book 'Awakenings' (Sacks, 1982), which in turn inspired the Harold Pinter play 'A Kind of Alaska' in 1982, and a 1990 motion picture starring Robert de Niro and Robin Williams. For Sacks, behind Awakenings was a struggle for academic publication. Sacks originally documented the case in the form of patient stories that he sent to the editor of the Lancet and the British Medical Journal. Though he was himself satisfied with this format of publication he wrote, "I then found myself under pressure - an all too common academic pressure – to write proper articles and not simply letters." He continued (Sacks, 1983):

"With much labour (because they went against the grain, so to speak) I put everything I could in an orthodox or conventional format-papers full of statistics and figures and tables and graphs-and submitted these to various medical and neurological journals. To my amazement and chagrin, none was accepted - some of them, indeed, elicited vehemently censorious, even violent, rejections, as if there were something intolerable in what I had written. I was very taken aback at this and could not help contrasting what I was now encountering with the days when I had been a neurological resident and had found instant publication for the papers I wrote. Now, for some reason, strong objection was aroused. I was struck by the irony, the paradox, of all this: when I had nothing much to say I could be published without difficulty; now I had something to say I was denied publication."

In this paper we use this history of Oliver Sacks as a prompt for thinking about naturalistic aspects of research. The paper presents the role of AR in negotiating the researchers' relationship with a community and the meaning of that research to the community. Can the researcher maintain both an impulse to be a part of a community and to belong to research? Where does research start and where does it end? What part does the naturalism of the ward or organization play in relation to the formation, framing and value of the research, and how does it confer value upon the outcomes? How does the researcher return to the ward or community and then again depart from it back to the mode of research? Our field of focus is not neurology nor healthcare but Information Systems. Action Research (AR) is the primary methodological focus and we additionally present it as a meta-cycle, standing over other research methods including further instances of AR. The paper presents and reports this meta-cycle. The paper proposes that this meta-cycle connects research and researchers to phenomena with which they must engage; the organizational setting, organizational life, the politics and the future. Research starts in this meta-cycle and it is shaped by it. Research then culminates in this meta-cycle, moving the organization onward and prompting research again as the AR continues. Understanding the meta-cycle enables the greater context and consequence of the research to be understood, and illuminates the phenomena that shape it and give meaning.

The Contribution of this Paper

The problem was to organize a longitudinal study and to work both as part of the organizational community and part of the research community. The case presented is of a single organization[1] where research work took place in the manner of a clinical setting for fifteen years.

This paper describes additional aspects of AR through which it was developed as a meta-cycle that orchestrates the contribution of multiple research components to a given community. An analytical frame is used to describe this orchestration, as follows:

- Integration – the meta-cycle is integrative: multiple methods, inductive and deductive approaches, quantitative and qualitative components are all permitted and the dilemmas between them are resolved by the meaning assigned within the community that receives them.

[1] There is also a pan-organizational case that was developed across ERP sites.

- Collaboration - the collaborative core of AR is further elevated; a social justification and transparency is promoted by the meta-cycle through which participants are able to contribute to the direction of research between projects as well as within projects.
- Commitment to theory - through its action, the AR meta-cycle resolves the twin commitments of contribution to practice (or community) and to theory.

Action Research and Its Potential

In a new paper, Avison et al (2016) summarise AR as follows:

- Epistemology: Rooted in a pragmatic paradigm. Research occurs in real organizational settings in response to identified issues in a frequently complex, fuzzy and ill-structured problem situation. All epistemologies are possible.
- Ontology: Strongly collaborative and interventionist (with practitioners providing continuous feedback). The area of interest (the problem situation) and the phenomena within it do not remain static in the iterative process of AR.
- Generation of theory: Results often context-based, but similar patterns or observations may be observed. Some generalisation within or across research projects may be possible.
- Data and analytical techniques: Qualitative and/or quantitative data. Participation and participatory groups (e.g. focus groups, consensus development, scenario workshops,) along with questionnaires, interviews etc.

Action Research is a refined cycle of identifying community problems, diagnosing, planning, intervening and evaluating the results of action to create learning and to plan consequent interventions (Checkland, 1991, 2010). Proponents have demonstrated that AR makes sense in the cognitive and intellectual processes that bridge between theory and practice; that it is part of the reflective being in the world that generates formal understanding that can be shared and that can encourage progress (Coghlan 2010, 2011). There is a strong argument that AR is of high value in understanding how to link researchers to the community, obtain empirical knowledge, and systematically link theory to practice (DeLuca et al, 2008). The difficulty of publishing AR studies in fields like IS and management more broadly have been well noted (Avison et al., 2016), but AR has a notable presence in educational research, healthcare and nursing (McNiff, 2013, also McAteer, 2013, Munhall, 2012, Munn-Giddings and Winter, 2013). This presence perhaps transfers responsibility to critics of AR to explain why it is suited to these theoretically rich and scientific arenas but not to business and management. Moreover, there is strident call for business and management academics, including researchers of IS, to make their studies more relevant to practice (e.g. Baskerville & Myers, 2004, Peppard et al, 2014). The case for investment in AR is therefore strong.

AR is most associated with Kurt Lewin who worked to develop the theory through an experimental logic to study social psychology within the framework of field theory. His approach is articulated as a linear process that flows akin to a water drop from engaging the human situation, diagnosing the problem, unfreezing the

situation, re-engineering, re-freezing, and disengaging (Baskerville & Wood-Harper, 1998). Lewin's experimental approach has been replicated in the field of operations research by the Tavistock Institute and led to the psychological equivalent of this field (Mumford, 2006). Tavistock mainly used the approach to study psychological and social disorders caused by battlefi elds and prisoner-of war camps. In this approach, researchers intervene in each experimental case through transforming some problematic elements surrounding the object of the study. The impacts of all actions need to be recorded and studied to develop a body of knowledge about fruitful solutions. Lewin elaborated his approach in six stages to facilitate social change: situation analysis, fact finding, model conceptualizing, solution planning, action implementation, and evaluation (Baskerville & Wood-Harper, 1998).

AR itself is not a uniformity but a collection of related codes (Cassell & Johnson, 2006). Amongst these is a strain with high commitment to participatory action: AR that aims to alter the stakeholders' problematic situation towards a more self-managing, liberated, and viable state. Interpreted idealistically, this implies a political discourse of liberation. To the research study profiled here, it was highly pragmatic relying on participation to make stakeholder perspectives in the commissioning and framing of research studies, as well as the interpretation and acceptability of their outcomes. Politicizing the research process renovates the power relations and empowers collective shaping of the research process, including planning, data collection, and analysis (Mountz et al., 2008). The approach facilitates iteration and repetition of problem diagnosing and performing solutions as a way to build learning and achieve evolving research objectives (Baskerville & Wood-Harper, 1998; Checkland & Holwell, 1998).

The Research Background

The extended study took place at Salford City Council, the administrative authority of a city that borders Manchester in the North West of England. Salford grew through the same process of Industrial Revolution that characterised other urban centres in the north of England over the 18th and 19th century; it providing the docks for the Manchester Ship Canal and being a centre of new engineering firms. Like other industrial centres in the UK, it also declined in terms of employment through the 20th Century, a process that made its city council especially important in terms of functions it could provide in relation to housing, income benefits, education, economic development and poverty amelioration. Nonetheless, in 2011, Salford remained one of the twenty poorest areas in England according to an index of multiple deprivation factors developed by the Department of Communities and Local Government (The Guardian, 2011).

Table 1 shows the research undertaken in Salford over the extended study period. There are three columns. The first describes the key engagements undertaken by the academic research teams. The second identifies the principal research methods utilized. The final column describes the theoretical components of the work, identifying the key advances made. In this third column a simple heuristic of 'Strong, Medium and Minor' is used to describe how much focus was given to theoretical development.

Project	**Primary Research Method**	**Theoretical Work**
The creation of a method for process reengineering, entitled	Design Thinking and Action Research	Strong – SPRINT combined socio-technical concepts and

Salford Process Reengineering Involving New Technology (SPRINT) (Kawalek et al., 2005; Wastell et al, 2000).		BPR theory in a single method (Wastell et al., 2007)
Projects undertaken using SPRINT in areas including Housing, Environmental Services, Education, Elderly Care, the registration of Births Deaths and Marriages, Financial Services, and Democratic Processes.	Action Research	Medium - these were collaborative projects of impact on the council, enhancing its effectiveness and its efficiency. They added to the theoretical understanding and maturity of SPRINT and motivated the creation of new versions of the method.
Development of strategy related to sourcing decisions.	Mixed methods interviews, quantitative data analysis and surveys.	Minor – this work utilized academic theory (Willcocks et al, 1995) but did not directly develop it. Some later work proposed enhancements to the theory but this was not developed for publication.
Development of change management methods and strategy associated with innovation around call-centres and customer services (Kawalek, 2007)	Action Research	Strong – innovation theory was redeveloped for the public sector and used to foster an alternative change approach; one characterised by radical non-conformity to the prevailing organizational ethos (Kawalek, 2007).
Courses and projects on the theme of 'transformation' (Clifford, 2014).	Action Research and Action Learning.	Strong – an extensive programme of participation by managers enabled a broad study of change resistance and its systemic form (Clifford, 2014). Additional inquiry on the relationship of Action Research and Action Learning has not yet been published.

Table 1. Key Research and Consultancy Projects At Salford City Council.

Associated with these projects were a number of additional, smaller actions related to the development of the IT team at Salford, change and reflection workshops, social media, and co-teaching of other local authorities. There were also student projects at Masters level using qualitative and quantitative methods. As the project matured, there were spin-off projects involving more than forty other councils, the Association of Greater Manchester Authorities and national projects launched by the Office of the Deputy Prime Minister (ODPM). Reference was also made overseas, to New Zealand and to the Office an Taoiseach in Ireland.

The research took place from 1998 onwards, over a period of time that included most of the expansion of public service spending under the UK "New Labour" government headed first by Tony Blair and then by Gordon Brown. In 2010, this government was replaced by a new administration based upon a Conservative and Liberal Coalition. This was headed by David Cameron of the Conservative Party. The two government eras were very different. During the years of New Labour, budgets were available for reform and transformation projects. The research team was substantially involved in the direction of these renewal programmes. From 2010 the new government placed the emphasis upon austerity measures and the council sought to cut services and make savings in order to achieve new financial targets.

During this period, the research team was still developing a series of internally focused, collaborative AR projects based on an innovative series of teams known as "trios." There were discussions about redirecting this effort to achieve the new public spending cuts and a full programme of transformative change for the whole council was envisaged (Clifford, 2014). Ultimately, however, this path was not chosen and a major consultancy company was hired to prepare recommendations for achieving the new financial savings. With this new emphasis in policy direction and increasing turnover in management positions, the relationship between the university research team and Salford Council effectively ceased in 2013.

This one and half decades of research had begun with an invitation to attend the office of the then Assistant Director of Information Technology in Salford Council. His initial motivation was imprecise, but that he wanted to access another set of thinking and ideas from outside of the council sector. Hence, a call was made to the then Department of Computer Science at Manchester, where this invitation was initially received. The response of the academics had been keen but was also imprecise. They were interested in Action Research (e.g. Checkland and Holwell, 1998; Mumford, 2001) and had been working on business process change methods (e.g. Kueng et al., 1997; Wastell et al, 1994). It was an interesting opportunity to engage in practice and to develop theory and methods as "naturalist and physician both" (Sacks, 1985). Initially, it was believed that the collaboration might last for some months. As the work became of increased value, the duration extended giving the academic researchers both an extended opportunity for study and a problem of maintaining coherence and value for the organizational community and the research community to which they belonged.

It was this growth, both temporal and in terms of complexity, that prompted the question of how to structure extended research engagements. Initially managed by a conventional project Steering Board, over time researchers began to understand the greater programme of research as an AR project in and of itself. From 2007 onwards, it was explored and managed as such both retrospectively and in real time. The framework provided by Checkland and Holwell (1998) was of particular utility, and the whole project was scrutinised for the ways that it was both explicitly participatory and oriented towards the theoretical. The outcome was that AR became not just a form of research utilized within a project but the arbiter over the value of all research in the organizational setting. This is an important point, connecting the project back to Coghlan's argument that AR is a theory of science (Coghlan, 2011). The meaning and value of the engagements could only be understood in terms of the participatory/theoretical impetuses of the AR, and the degree to which that AR was well-run was the degree to which the meaning and value could be confidently adjudged. There is no arbiter of value that is greater than the community to whom the change programme belongs and AR itself is the mechanism by which the community is connected to the change programme.

There were three themes developed by the meta-cycle over a number of projects and years. The principal example utilized in this paper is the second one, that of the role of the management structure in the radicalness of change. This will be made clear later on.

- Theme: multi-team participation in AR.
- Theme: role of management structure in the radicalness of change.
- Theme: nature of obstinacy in organizational change.

Research Report & Discussion

The commitment to longitudinal research that is at the root of this paper is in fact developed from a deeper root; a commitment to community. It is the outcome of the development of a research pattern that has sought to be amongst people, firms and other organizations, and to understand them deeply. Being amongst these organizations has driven questions, and then theory and papers (e.g. Wastell at al., 1994). Akin to Oliver Sacks's telling of his work, the questions have then driven us back to firms, organizations, to community.

This approach enabled and required the development of high trust between academic researchers and organizational actors, including both senior and junior ranks in both public and private settings. This development of trust served in turn to extend our studies. Through this process it became that instead of solely relying upon identifying gaps from the literature in order to define our research problems, the literature became a backdrop and aid to the questions that emanated from within the organizational setting.

It is well-reported that qualitative research in general and Action Research in particular bring forward difficult complexities over the conduct of research projects (e.g. Checkland and Holwell, 1997; Coghlan, 2011). In-situ when there is a series of research studies in the same organizational setting, the problem exists at a second level. As well as each study being managed in and of itself, there is the issue of drawing lessons and coherence across studies, of being accountable to the community thus represented, and of also identifying and drawing out wider themes for the development of theory.

Figure 1 describes an AR meta-cycle. After iterating these dynamics in this organizational setting and another contemporaneous project elsewhere (see Lorenzo et al., 2009), the research team started modelling this cycle to scrutinise it, replicate it and explore it with colleagues. This meta-cycle constitutes a research project structure that acknowledges the whole partnership as AR, and then critically seeks to maintain the commitments of participation and theory generation across the projects themselves. In Salford, these projects were often AR but could have been any other method.

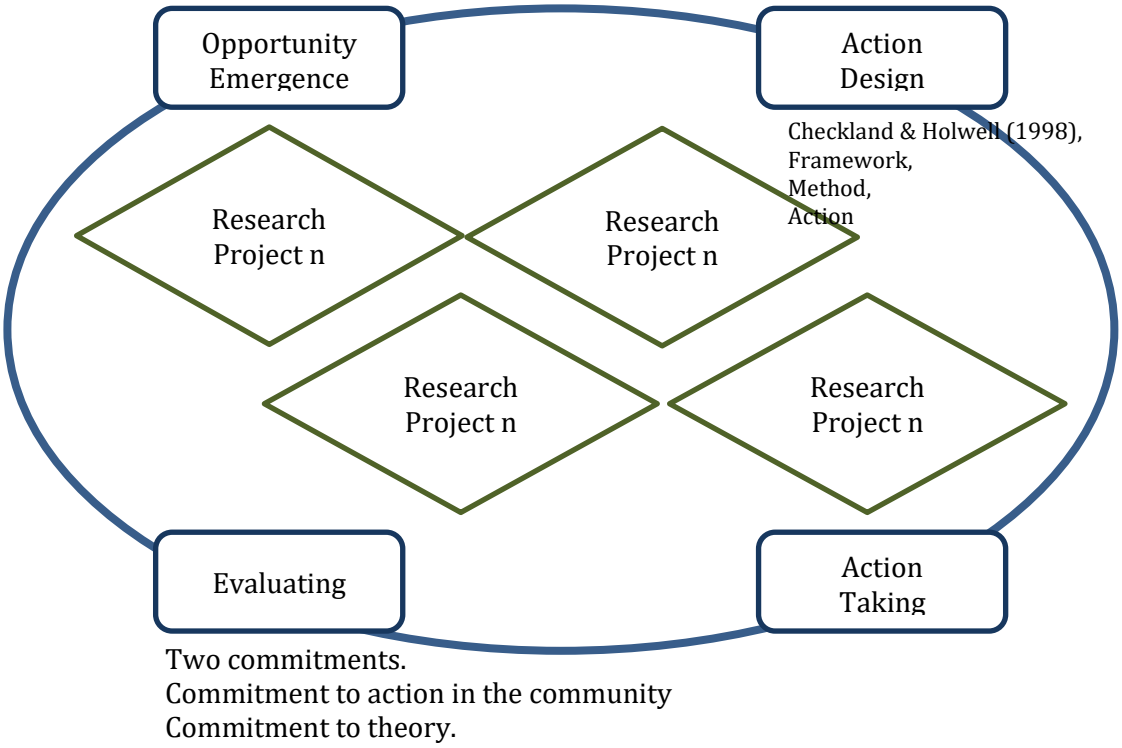

Figure 1: The Meta-Cycle – Meta, from the Greek preposition and prefix meta- (μετά-) meaning "after", or "beyond".

In Figure 1, it is key to note that Checkland and Holwell's AR framework was utilized in order to manage the flux and complexity of the cross-project research themes. In addition, it is vital to note the commitment to community and to theory. The meta-cycle considers whether the combined outcomes of the project are serving the values and needs of the community, and whether there is learning for theory. The actual steps (Opportunity Emergence, Action Design, Action Taking and Evaluating) are chosen to represent a typical AR cycle but they are reconfigurable in-situ. In Figure 2, the diagram is presented again, this time to illustrate example projects. The question of what constitutes a cycle is the same as in AR projects generally and requires formalisation around a theme. The theme represented here emerged from several of the latter studies in Salford and considers the role of the management structure in determining the radicalness of change. It reflected the observation gleaned from within AR projects that a range of satisfactory outcomes could be generated, but that managers participating in the AR seemed to have privileged position in determining which were adopted.

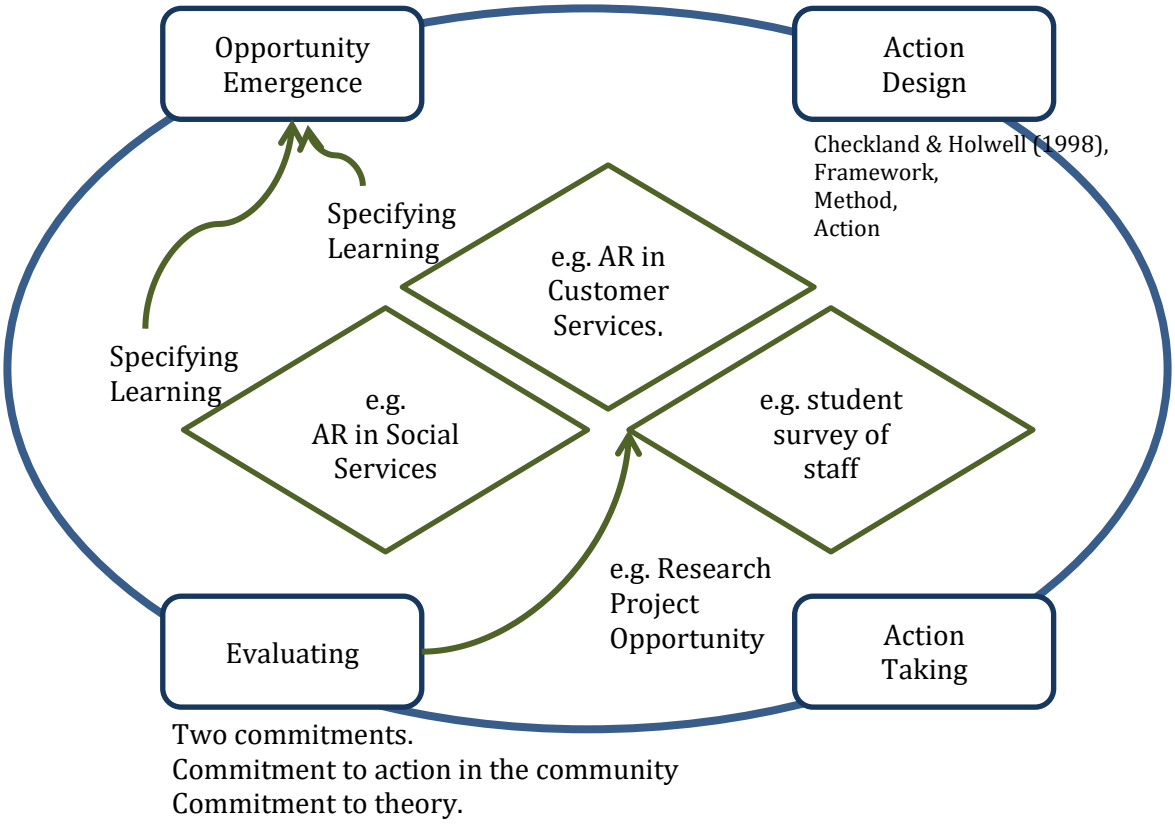

Figure 2: Configuring projects to address an emergent research theme (the role of the management structure in determining the radicalness of change).

The further research report here is organized according to the analytical frame set out above in the Introduction. Within each component, the report starts by reporting a meta-cycle problem, i.e. an issue that was addressed at the meta-level by those operating within this arena.

Integration

Meta-cycle problem: As the number of projects grew, how could consistency be maintained between them? Were there epistemological or ontological issues that needed resolution? It had been possible to understand the engagement at Salford as a series of atomic studies, solving problems but little related to each other. Potentially these might have been understood solely as "research access" given in response to a literature rather than following a situated problem in the organization itself. Yet it became evident that there was a key opportunity for learning across projects. The development of the SPRINT method made this manifest. Given that participants were working with a common AR variant across different projects, it was asked what insights might be gained across these projects and then what theoretical issues did they raise or illuminate. The meta-cycle was used to integrate across projects and to assist processes of learning and questioning. This required some reporting of the dilemmas and ideas raised within projects and then of their relation to theory within the meta-cycle. The business process method itself was subject to such scrutiny as was the concept of a socio-technical system. Amendments were put in place to allow participants to engage with a wider range of issues within studies (e.g. the introduction of a component based upon Design Thinking (Brown & Wyatt, 2015). The training of staff became a common issue, not just in relation to

AR or SPRINT, but in relation to the modernisation of the council and the nature of a 21st Century workforce. Such integration across projects also permitted an increasingly catholic approach to research methodology. Although the Salford study retained an emphasis on AR, it was conceptually possible that it could utilize multiple methods and that these could be quantitative, qualitative, inductive or deductive. This is because of the overriding principle within AR that the participants assign the meaning to the research. Any form of research method might be followed to address a problem identified within the AR meta-cycle, but whatever the character of that research method, in the social realm it would be the interpretation of actors would decide upon its value. It could be an attempt at positivist research with a deductive structure and Popperian hypotheses (Popper, 2005), but if it concerned the community, the community would have to assign its value and hence the research would be returned to the social and the interpretive. AR was the mechanism of that translation; a formal mechanism of the meta-cycle. The meta-cycle organised the social management of research. Social interpretation would adjudge value. Hence this principle of participation is inimical to AR (e.g. Avison et al, 2016).

Meta-cycle problem: fragmentation and loss of theoretical development between projects	
Framework of Ideas	Multiple interventions on behalf of the community of participants in Salford City Council. Naturalism – allowing participants to identify problems to work on.
Method	Analysis of problems and dilemmas at a meta-level; analysis of theoretical implications at a meta-level; value and meaning assigned ultimately within the social processes of the meta-level.
Action	All projects of all research methods

Table 2

The potential for studies to become atomic also brought with it another hazard. Was this project to become consultancy in the manner of a series of engagements for a major client, or did it preserve some characteristic that merited the alternative designation of 'research'? This issue occurs many times in the AR literature (e.g. Avison et al, 2016), and many scholars defensively assert that AR is not mere consultancy (although papers criticizing AR as such are not to be found). The issue is complicated because it potentially confuses role with motivation. Plausibly a consultant can make a contribution to theory just as a researcher can fail to make a contribution to theory. It is the quality of research action that is of account and its situation in an extended inquiry. Conventionally, this issue is resolved by AR scholars by the commitment to theory that must be shown within AR projects; there must be a theoretical account even of a project that does not of itself enhance or develop theory. Hence in Table 1, the different levels of engagement in theory development are recorded in the right hand column. Even in the most modest case, that of the development of sourcing strategy, theory was a component of the study. Beyond this, as the meta-cycle was reviewed, the researchers also began to see that as long as there was an overall account given to theory, there could potentially be non-theoretical pieces of work within the cycle. This could be justified where such work added context or depth that might later inform a theoretical study. In such light, because the action of consultancy might alert the researcher to new phenomena, it can also be a contribution to a greater theoretical study.

Collaboration

Meta-cycle problem: After a number of AR projects, it was observed that there was a tendency for projects to migrate towards less radical outcomes rather than the most transformational prospects that were discussed within the AR. It was recognised that each time this had happened, the AR had allowed justifications to be shared amongst those working on the projects, and that high levels of transparency were being effected. Nonetheless, at the meta-level, academic researchers and IT members discussed whether the nature of AR itself was leading to less radical outcomes. It was proposed that this might be due to AR participants being unable to give sufficient time to project proposals as they had to work on AR as well as on their normal jobs. As a response, it was decided that in a new case in Social Services, in addition to normal AR participation, there would be two secondees working full-time on AR, with backfilled posts.

Meta-cycle problem: encouraging radical outcomes	
Framework of Ideas	Business process study. Focus on effecting radical outcomes through AR
Method	Full-time secondment introduced to the methodology.
Action	Social services case

Table 3.

Two social workers worked full-time on a service redesign project. They engaged with colleagues from their department as well as participants from the IT department. They sought to create a renewed structure and culture for elderly care; an environment they described as idealism constrained by bureaucracy and which faced growing service demands. Initially seconded for two months, one of the social workers extended his study to five months in order to work through a process of consultation, design and planning with colleagues from across the Social Services function. During this time, the social workers were given desks and made to feel welcome in the IT department, which was a short drive from their normal base. Academic researchers would meet them there, as well as undertaking meetings at other offices including the normal Social Services office where the secondees retained a desk. The academic researchers worked to assist the social workers through analysis and design tasks, talking over the priorities and needs of the project and hearing from the social workers about the insights and resolve that they brought from other colleagues. Contemporaneously, the academics reviewed the performance of the method of change (SPRINT) and the theory that stood behind it (an integration of sociotechnical systems and BPR). Some radical design proposals emerged; social work practices should be set up in small premises in local communities but with a common, administrative support infrastructure behind them. Budgeting and resource decisions would be devolved downwards to the lowest appropriate level, and the Internet would be used to source and advertise places in elderly care homes.

A key aspect of AR is its collaborative commitment and then the surfacing of political dilemmas that arise from this. Collaboration does not necessitate that AR functions solely on behalf of interests of "the workers", but it does necessitate that its political character be made transparent. Hence, in the case of elderly care redesign that was undertaken by and within the Social Services department itself, it was possible to evidence a shift in the political ownership of the project as it worked

through different AR cycles. At its inception, it was the social workers themselves who took the lead and developed the design proposals. Their more senior managers had helped initiate the project but did not initially participate on a regular basis. This changed as new designs were circulated and enhanced through workshops and meetings amongst social work staff. Senior management entered into the project. They argued that the idea of independent social work practices was too ambitious and that change costs would be too high, especially at a time of growing demand. The senior managers suggested and attended a workshop at the Social Services office in Eccles, Salford. The academic and IT teams were also represented. At the workshop, the senior managers openly advocated the redirection of the project. It should be more pragmatic, they proposed, and less committed to an ambitious, technological infrastructure. There was discussion and alternative views were put but at the end it was clear that the alteration to the project had garnered support. A few days later, one of the seconded social workers told the academic and IT colleagues that he had agreed with colleagues that the AR project should change direction. The social workers preferred to start working towards less radical outcomes. The IT team – collaborators in the AR – expressed disappointment but accepted the shift of opinion. The project began to develop and implement a more modest but plausible case management system.

An AR project according to Avison et al. (2016), is "Strongly collaborative and interventionist (with practitioners providing continuous feedback)." The social work case evidences this, giving emphasis to the transparency achieved. It had shifted its emphasis towards the views of senior management but this had been done openly. Moreover, the senior managers had run the potential risk of being unable to dissuade colleagues of the existing course of the project.

Meta-cycle problem: A concern remained – AR projects were leading to successful but conservative outcomes. It was again proposed that this was potentially inherent to the method of AR itself. In the Social Services case it had been obvious that Senior Managers could influence the course of an AR project and to conduct it towards less radical outcomes. Within the specific AR case this had to be accepted, but at the meta-level adjustments were again made so as to promote more radical projects. This would be done by attaching the AR to a project outside of the normal organizational structure and with a management team that was competing for resource with that existing management structure.

Meta-cycle problem: encouraging radical outcomes	
Framework of Ideas	Business process study. Focus on effecting radical outcomes through AR. Extension of existing AR frame by reference to literature on Innovation (Christensen, 1997)
Method	Constructing AR projects in new organizational environments and on behalf of, and in conjunction with, a new management structure.
Action	Customer Services, Revenues & Benefits

Table 4

As the social services project was developing, a new project was being started. This was constructed in a new way, relying on volunteers into a new organizational structure. This new organizational structure would build new functionality based on a customer-contact centre and use this to take over some of the functions of the

Finance Division (i.e. Revenues and Benefits). Initially, it operated as a "greenfield" project, though it was literally located in a partially rundown premises across the car park from the man Salford Council offices. It was given its own and new management structure. These managers participated in the AR from the inception and had an interest in bringing radical proposals to fruition – the project needed to gain resources allocated to existing service areas and it could only do this if it could present a strong set of advantages. The strategy became known as the 'Salford Bubble' (Kawalek, 2007); a SPRINT AR project amended by concepts from technology innovation theory (Christensen, 2013). The project grew quickly, ultimately growing to over 350 staff. It recorded very high levels of customer satisfaction (96%) and performed at the national average for cost efficiency. The service won multiple national awards.

Commitment to Theory

Meta-cycle problem: theoretical concerns were occurring and recurring within projects. It was important to work to identify them, to work on them and to take the opportunity of building theory within and between projects. These theoretical concerns could be used to fashion the projects themselves, determining the framework of ideas, the methods taken and the scope of action. The development of the AR project in Social Services had been a case in point. Working across different projects, researchers were seeing that the part played by managers in the AR seemed to determine the degree of radicalness of outcomes. In the early projects it had been seen that managers could moderate AR towards less radical outcomes without subverting the whole project itself. This was because the AR tended to develop a range of possible outcomes and that the project cold be an agreed success without necessarily achieving its most radical aims. Participants in an AR project seemed to be committed to delivering a success of some sort more than they were committed to delivering a particularly bold or innovative outcome. This had become clear in the Social Services case where managers successfully realigned the project through and after the Eccles workshop. As a result there was a reconstruction of the Framework, Method and Action of the meta-cycle. Proposals began to emerge that would amend the method in order to construct a project wherein the managers had a vested interest in more radical outcomes. All of this relied upon judgment, of course. There was no claim to possess a definitive measure of radicalness but instead, using the language of central government's "transformation" agenda, participants began to theorise about a level of change that would require the redrawing of council organizational boundaries and the redefinition of relationship with citizens. This was effected in the subsequent 'Salford Bubble' through which the interests of managers were aligned with the acquisition of resources from other functional divisions; these acquisitions could not be completed without marked and demonstrable advantages.

Between the earlier projects and the 'Salford Bubble' the shift had been to reposition the managers as AR participants cum service owners, to AR participants cum service acquirers. Theoretically, researchers were seeing evidence that the role of the managers within the AR affected its outcomes and that the configuration of their role could affect the radicalness of the project. Literature confirmed the originality of the insights that were being built up (e.g. Coghlan, 2001; Eden & Huxman, 1996). These insights coincided with an opportunity to develop the largest study yet; an ambitious attempt to teach the lessons of SPRINT and the 'Salford Bubble' and to engage on a new scale in order to develop a series of more efficient and effective council services around a substantially redesigned organizational structure. This

project was known as 'Salford Transform' and involved over 100 AR volunteers from across the council structure. It was to take place in two parts and to last a total of six years. For the first time, the AR principles of the earlier projects were explicitly melded with concepts of Action Learning (Revans, 1983), so as to assist participants in self-directed and peer-facilitated learning. Another initiative was that participants attended classroom sessions at Manchester Business School in order to learn about topics of Change Management, Innovation and other items of business school curricula. Yet of critical focus for the development of theory was the role that managers would play within the AR. A repeat of the 'Salford Bubble' approach was not proposed as there were concerns that this might not be as effective in the new setting of a pan-council project. Instead, the problem of the role of managers would be managed by the AR project itself. The outcome of this was that AR participants developed a model for the project that was represented as a 'Figure of 8' wherein a novel arrangement of 'trios' (three staff working together on a common problem) would develop findings and proposals for managers to assess. Managers were responsible for assigning resource to these proposals and then widening the support from other parts of the council. A number of significant successes were reported, in Social Services, Education and other areas, and the level of learning amongst the AR teams was reported very positively. Nonetheless, in the changed circumstance of the post-2010 government, the project's most radical propositions were ultimately rejected and replaced by a cost-saving project managed externally. The theoretical problem of the role played by managers in AR remains open and amenable to research of alternative methods (Clifford 2014).

Meta-cycle problem: encouraging radical outcomes	
Framework of Ideas	Action Research melded with Action Learning. Theorising over the role of managers in AR.
Method	Assigned the problem of working out the role of managers within AR to the AR process itself. The result was a 'figure of 8' model wherein managers were asked to arbiter over findings and proposals made within the AR by volunteer participants.
Action	Salford Transform – cross-council project

Table 5

The politics behind this pursuit of theory is problematic. The concept of the meta-cycle had been participatory. The researchers had associated it with a commitment to openness and participation on the topic of research management. There was a spirit of openness wherein participants, whoever they were, could comment, make suggestions, suggest priorities and attend meetings. Records and notes were kept and researchers discussed the themes that would be encountered through forthcoming, planned research. This case was different. This particular issue – an interest in achieving radical outcomes – was maintained only by the academic researchers and a group of managers associated to the AR itself (from within IT and Customer Services). In other words, the participatory element of the meta-cycle was retrenched in order to achieve a key academic/managerial goal. This was a significant delta in terms of the relationship of the research and the community, but this political shift was made evident by the meta-cycle itself.

Conclusion

This paper describes additional aspects of AR through which it was developed as a meta-cycle that orchestrates the contribution of multiple research components to a given community. In this it assists and formalises the action of naturalistic research. It serves to provide integration between the multiple methods of the research engagement. The collaborative core of AR is further elevated as participants are able to contribute to the direction of research between projects as well as within projects. Finally the commitment to theory is maintained and situated within and between projects.

The longitudinal nature of this research is an obvious characteristic – one and a half decades. Yet it was motivated more profoundly by the cause of belonging to community. The lessons are less about the longitudinal than they are about the primacy and utility of AR in settling a researcher's relationship with that community. We would argue that the longitudinal aspect is an outcome of arranging the commitments of participation, action and theory through AR, and then that the longitudinal aspect brings research benefits of its own.

This implies an ordering associated to the naturalistic researcher's contribution. This contribution comes first to the community and then, through a further process of development, towards the development of theory for the research community. One comes before the other, interestingly establishing a primary contribution in the form of community impact before the more fundamental theoretical insights are drawn out. Hence, the research establishes a path to relevance. We see this in the many projects that preceded and accompanied the theorising over management involvement in AR and their impact on the outcomes.

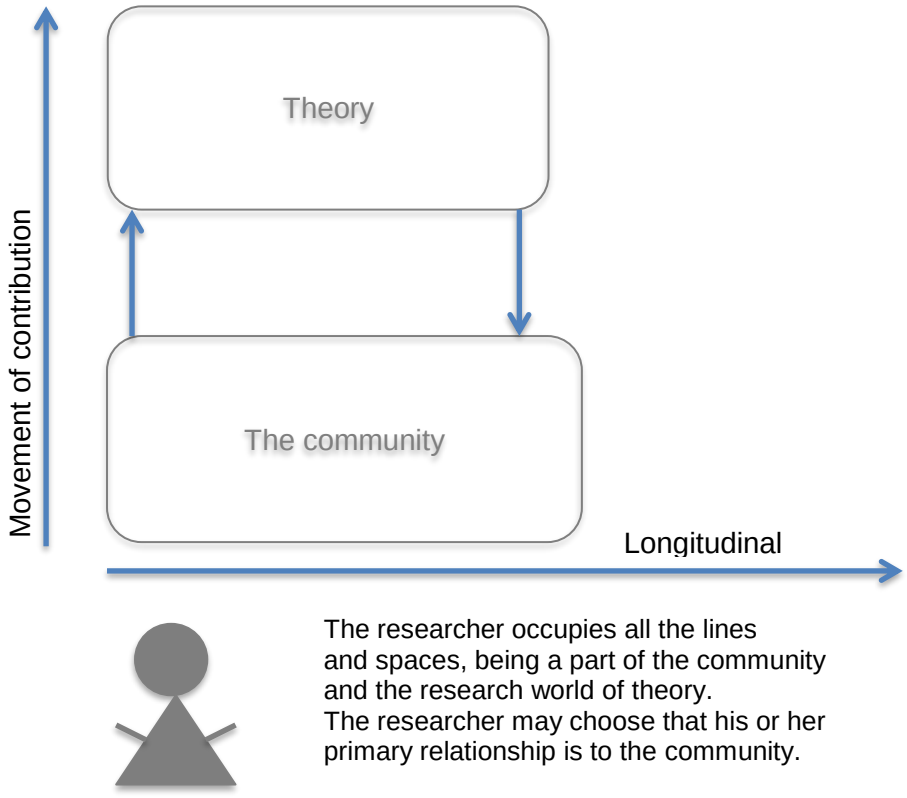

Figure 2: The Community and the Research World of Theory.

Fundamentally, the following question opens: if research belongs to the social realm then *how does it belong to the social realm?* This arrangement of the research and its domain is problematic in all cases of social science and arguably in all cases of science. Interpreting AR as a meta-cycle gives a way managing this in-situ during the research activity itself. These are the same issues that motivated Sacks in neurology. In neurology, as in other parts of our research worlds, there is always this potential for a problematic relationship both in terms of how the research problem is articulated in relation to the social domain, and in how this same research and its outcomes are then interpreted by the domain. AR provides a mechanism for interleaving between domain and project, each time declaring the participatory, action and theoretical movements that accompany the research.

Finally, one other cause: Sack's recollections tell us of the researcher's desire to belong to the social; to be of the community as well as of the laboratory or of the journal. This duality between the community and the research is not one of compromise, of seeking to have it all, or entering into an additional trade-off. This *belonging to the social* can as much be a strength. The phenomena that one understands and appreciates from the ward can assist with the medicine and the medical practice. So too, in management, business and our Information Systems. This perspective brings its own problems, of course, but that is where the core of research discipline comes to the argument: we always need to know in what context knowledge arises and when it might not apply. It is constantly shaped and shaping.

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